

## REMARKS

Claims 1-6 are pending in the instant application. Claims 1 and 4 are rejected under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 1,441,459 to Small ("Small"), or alternately by U.S. Patent No. 1,839,964 to Harvey ("Harvey"). Claims 1-4 are rejected under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 6,267,712 to Franke ("Franke"). Claims 2, 3 and 5 are rejected under 35 U.S.C. §103(a) as obvious over Harvey in view of Franke. Claim 6 is rejected under 35 U.S.C. §103(a) as obvious over either Small or Harvey taken individually. Claims 5 and 6 are rejected under 35 U.S.C. §103(a) as obvious over Franke taken alone. Applicant respectfully traverses all rejections for at least the reasons set forth below.

Claim 1 is amended above to explicitly recite that the dimension of overlap between the inner and outer machine parts is a radial overlap and moreover, that the outer machine part is deformed radially outward into the plastic range of material strain. Dependent claims 3 and 4 are amended to recite that the contraction of a raceway ring or inner machine part corresponds to an expected level of contraction induced by a running disk or outer machine part having a predetermined greater wall thickness. The dependent claims further recite the overlap being a radial overlap consistent with claim 1 and in order to improve the claim grammar, recite that the reference level of contraction of the inner machine part is where the running disk or outer machine part remains within a range of elastic deformation. These amendments to the claims are all fully supported by the original specification as filed. No new matter has been added.

As amended above, the amended specification paragraphs [0002] and [0018], correct a minor error in the units of the dimensional spread. No new matter has been added by this amendment.

Claims 1-6 are rejected under 35 U.S.C. §112, first paragraph, for lacking enablement. Turning to the rejection under §112, first paragraph, for lack of enablement, in supplying an enabling disclosure, a patentee is entitled to omit what is well-known to those of ordinary skill in the art. "The specification would be of enormous and unnecessary length if one had to literally reinvent and describe the wheel *Atmel Corp. v. Information Storage Devices, Inc.*, 198 F.3d 1374, 53 U.S.P.Q. 2d 1225 (Fed. Cir. 1999). In this case, the knowledge of an artisan of ordinary skill more than fills any gaps alleged

in the disclosure. In the instant specification, for example, at paragraph [0018], a general case where a dimensional spread of 80  $\mu\text{m}$  results in an overlap of between 40 and 120  $\mu\text{m}$  and deformation of the running disk 3. This clearly speaks to one of ordinary skill that an interference fit exists between raceway ring 2 and running disk 3. This interference fit results in compression between the raceway ring 2 and running disk 3, alternately described as the compression connection recited in the claims. Therefore, Applicant respectfully submits that the claim term “compression connection” is fully enabled by the instant specification. Favorable reconsideration and withdrawal of the rejection is kindly requested.

Turning then to the rejections over the applied references, the Office Action applies both Small and Franke as allegedly anticipating claims 1 and 4. Applicant respectfully traverses. Both Small and Franke are related to processes for making composite or bimetallic tubes. In both Small and Franke, tubes of disparate metals are located freely one inside the other, after which both tubes are drawn down through a die to reduce the diameter of both, plastically deforming in compression both the outer tube member and the inner tube member. Claims 1 and 4 are distinguished over both Harvey and Small.

As to claim 1, there is no radial overlap between the parts before they are assembled. In both Small and Franke, one tube is freely slid into the other until both are drawn down to a reduced diameter together. Moreover, because both are drawn down to a reduced diameter, there is no radial outward plastic deformation of the outer machine part. Therefore, claim 1 is patentably distinguished over both Small and Harvey.

As to claim 4, the recited features do not pertain merely to a method of manufacture or product by process as alleged in the Office Action. As described in the instant specification, for example at paragraphs [0013] and [0021]-[0022], the relative dimensions of the inner and outer machine parts according to the more specific embodiment of the present invention recited in claim 4 are selected to achieve plastic deformation of the outer machine part while conforming the contraction of the inner machine part to a level it would have been at where the outer machine part remained within a range of elastic deformation. This is not merely product by process, but structural limitations of the end product, structural limitations which are not present in the

prior art Small or Harvey.

Therefore, Applicant respectfully submits that claims 1 and 4 are patentably distinguished over Small and Harvey.

Turning to the rejection of claims 1-4 over Franke, the Office Action dismisses from the claims significant claim limitations “parts are fastened over one another by means of a compression connection”, “deformed into the plastic range of material strained” and limitations of claims 3 and 4. Contrary to the Office Actions assertions, these are not product by process limitations. The interface between the inner and outer machine parts, which is a compression connection as recited in claim 1, is a structural limitation no less than had the claims recited a keyway, spline or fastener connection. Similarly, the outer machine part being deformed radially outward into the plastic range of material strain is also a structural limitation, because it recites material properties of the outer machine part that would not be present had plastic deformation not taken place. As these limitations are entitled to patentable weight in the claims, they are not present in the Franke reference. There is no disclosure in the text of Franke regarding plastic deformation of the outer machine part. Additionally, Franke discloses that the outer bearing race (6) is held within the support sheet 5 by an embossment 13 on at least one side face. Such an embossment would not be necessary if the bearing race (6) were held in place by plastic deformation of the support ring (5) whereby Franke teaches away from plastic deformation. Therefore, claim 1 is patentably distinguished over Franke.

Turning then to claims 3 and 4, the Office Action similarly dismisses these limitations as allegedly product by process. However, in light of the above amendments, and the foregoing explanation, the Examiner will appreciate that these are in fact structural limitations and moreover, that the structural limitations are not present in Franke. This is so at least because Franke teaches no plastic deformation of the outer ring. Applicant respectfully submits that the claims are patentably distinguishable over Franke and requests favorable consideration and withdrawal of the rejection.

Turning then to the rejections under §103(a), the Office Action alleges that it would have been obvious “to have providing the bearing of Harvey with a tensioning roller and roller bearing, in light of the teachings of Franke, in order to provide a pressure roller that could be used for textile machines.” Applicant respectfully disagrees. The

tubing of Harvey is produced by cold drawing to reduce the dimensions and lengthen the tube. This deformation would not be desirable nor even tolerable if the inner machine part comprised a raceway ring of a roller bearing as recited in claim 2. The raceway ring of a roller bearing is known to one skilled in the art to require exacting dimensions and typically considerable hardness. Therefore, with this knowledge, one of ordinary skill in the art would not be motivated to deform a raceway ring by cold drawing as taught in Harvey. Such a process would effectively destroy the raceway ring. "If when combined, the references 'would produce a seemingly inoperative device,' then they teach away from their combination." *Tech Air Inc. v. Denso Manufacturing Michigan Inc.*, 192 F.3d 1353, 52 U.S.P.Q. 2d 1294 (Fed. Cir. 1999). Moreover, the provision of a pressure roller that could be used for textile machines relates only to Franke and has no impact or motivational support within the Harvey reference. A PTO rejection for obviousness is improper when there is nothing in the cited prior art references, either singly or in combination to suggest the desirability of the claimed subject matter. *In re Deminski*, 796 F.2d 436, 230 U.S.P.Q. 313 (Fed. Cir. 1986).

Turning then to the features of claims 3 and 5, the features of claim 3 were improperly dismissed by the Office Action as noted above with respect to the rejections as allegedly anticipated. The Examiner is kindly referred to the foregoing discussion. The Office Action does not allege that the combination of Harvey and Franke ameliorates the deficiency of either with respect to the features recited in claim 3. Although claim 5 is separately patentable, it is allowable for at least the same reasons as claims 3 or 1 from which it depends.

Turning then to the rejection of claims 5 and 6 as obvious over Franke alone, the proposed modification set forth in the Office Action, even presuming, *arguendo*, that one of ordinary skill in the art would have been properly motivated to make such modifications, do not address the underlying deficiencies of the reference with respect to independent base claim 1 or the intervening claims.

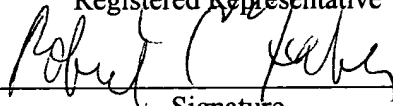
In light of the foregoing applicant respectfully submits that all claims recite patentable subject matter and kindly requests an early and favorable notice of allowability with respect of all claims. In the interest of brevity, Applicant has addressed only so much of the rejections as is considered sufficient to demonstrate the patentability of the

claims. Applicant's failure to address any portion of the rejections should not be construed as an acquiescence in the propriety of such portions not addressed. Applicant maintains that the claims are patentable for reasons other than those specifically discussed, *supra*.

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on November 14, 2006:

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Name of applicant, assignee or  
Registered Representative

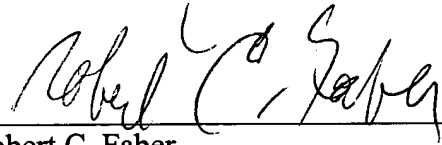


Signature

November 14, 2006

Date of Signature

Respectfully submitted,



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